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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/724,494 | 11/28/2003 | Jic Liang | TI-36793 | 1020 |
| 23494 | 7590 | 10/04/2006 | EXAMINER | |
| TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265 | | | | LEE, JOHN J |
| | | ART UNIT | | PAPER NUMBER |
| | | 2618 | | |

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/724,494 | LIANG, JIE |
| | Examiner | Art Unit |
| | JOHN J. LEE | 2684 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 November 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 and 8-10 is/are rejected.
- 7) Claim(s) 6 and 7 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 March 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 2, 4, 8, and 10** are rejected under 35 U.S.C. 102(e) as being anticipated by Simpson et al. (US 2005/0128988).

Regarding **claim 1**, Simpson discloses that a method of conserving power in a WLAN receiver (pages 4, paragraphs 35 – 38, Fig. 1, and page 1, paragraphs 8 – pages 2, paragraphs 15, where teaches allows the WLAN device to conserve power between times when it must receive or transmit). Simpson teaches that determining processing tasks (processing scanning tasks of the data packets) that need only to be operated for a brief period of time (time interval period) during the reception of a received packet (pages 4, paragraphs 34 – 40 and Fig. 1, 2, where teaches determining scanning process tasks to operate for the time interval of time during reception of the received high-priority voice packets or data packets). Simpson teaches that enabling said processing tasks (processing scanning tasks of the data packets) only during said brief period of time of said received packet (pages 4, paragraphs 34 – 40 and Fig. 1, 2, where teaches determining scanning process tasks to operate for the time interval of time during reception of the received high-priority voice packets or data packets and processing scan tasks within the period).

Regarding **claim 2**, Simpson discloses that the enabling step includes providing multiple control signals (multiple prove signals) for enabling and disabling said processing tasks controlled by a state machine that determines the state of the receiver (pages 4, paragraphs 34 – 40 and Fig. 1, 2, where teaches the receiver station provides a prove signal containing multiple control signals for instruction of processing tasks).

Regarding **claim 4**, Simpson discloses that the processing tasks includes radio control setting and said radio control setting processing task is disabled after the preamble of said packet (pages 4, paragraphs 34 – 40 and Fig. 1, 2, where teaches the processing tasks including radio transmitter/receiver within the mobile station contains a scanner for scanning one or more channels for beacon signals and control processing task can be instructed aborted after the expiring the period).

Regarding **claim 8**, Simpson teaches all the limitation, as discussed in the claims 1 and 2. Furthermore, Simpson teaches that a plurality of modules for performing processing tasks (Fig. 5 and pages 6, paragraphs 57 – 62, where teaches a plurality of modules coupled with controller for performing processing scanning tasks). Simpson teaches that a clock (558 in Fig. 5) with multiple clock zones for the multiple tasks (Fig. 5 and pages 6, paragraphs 57 – 62, where teaches a scan start time may be set and stored in a set of timer). Simpson teaches that a state machine for determining the state of signal processing of a received packet (Fig. 5, 6 and pages 6, paragraphs 59 – pages 7, paragraphs 68, where teaches receiver station for determining the state (active or passive state or low power mode or high power mode) of signal processing of the received packet data). Simpson teaches that the clock coupled to said modules (the timer coupled modules

in Fig. 5) and responsive to the state of the state machine for disabling said modules when processing is complete for each packet (Fig. 5, 6 and pages 6, paragraphs 57 – 62, where teaches a scan start time may be set and stored in a set of timer and based on the scan start time, mobile station may determine a power mode and enter into a low power mode when sufficient time is available before receiving the next beacon signal or GPR).

Regarding **claim 10**, Simpson teaches all the limitation, as discussed in the claims 4 and 8.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 3, 5, and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson in view of Brown et al. (US 6,366,622).

Regarding **claims 3, 5, and 9**, Simpson does not specifically disclose the limitation “the processing tasks include automatic gain control (AGC) and said AGC processing task is disabled after AGC settles for each packet, and the processing tasks include frequency offset correction and said frequency offset correction processing task is disabled after short sequence processing of each packet”. However, Brown teaches the limitation “the processing tasks include automatic gain control (AGC) and said AGC

processing task is disabled after AGC settles for each packet, and the processing tasks include frequency offset correction and said frequency offset correction processing task is disabled after short sequence processing of each packet" (column 11, lines 4 – column 12, lines 30, Fig. 5, 9, and column 17, lines 54 – column 18, lines 52, where teaches the processing including automatic gain control (AGC) and AGC is not necessary to perform and can be eliminated or substantially eliminated in the radio within inactive period, and the digital processing stage performs frequency offset correction and said frequency offset correction processing task during inactive period, after processing of the packet). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Simpson system as taught by Brown, provide the motivation to achieve reducing power consumption in wireless communication terminal.

Allowable Subject Matter

5. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose "the processing tasks include automatic gain control, radio control setting and frequency offset processing and said automatic gain control, radio control setting and frequency offset processing are disabled after each has completed its processing task for each packet" as specified in the claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Weinberger et al. (US 2005/0097376) discloses Convergence Device with Dynamic Program Throttling Based on Power Indicator.

Wang et al. (US 2006/0062200) discloses Mapping an MPEG Transport Stream into IP Packets for WLAN Broadcast.

Information regarding...Patent Application Information Retrieval (PAIR) system... at 866-217-9197 (toll-free)."

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231
Or P.O. Box 1450
Alexandria VA 22313

or faxed (571) 273-8300, (for formal communications intended for entry)
Or: (703) 308-6606 (for informal or draft communications, please label
"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to USPTO Headquarters,
Alexandria, VA.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is (571) 272-7880. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor,

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Edward Urban, can be reached on **(571) 272-7899**. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is **(703) 305-4700**.

J.L
September 30, 2006

John J Lee


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600